

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2002
DateRun: 01/15/2002
Experimenters: Heidi Wilcox
ClientType: Lab
ProjectNumber: Project #1
Substrates: Stainless Steel
PartType: Coupon
Contaminants: Inks
Cleaning Methods: Ultrasonics
Analytical Methods: Gravimetric
Purpose: Laboratory evaluations of alternative cleaning products

Experimental Procedure: Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning.
Degasing :Degasing the solution by keeping solutions in ultrasonic crest for 5 min at 120 F.
Cleaning : Ultrasonic for 2 min. at 120 F.
Rinsing : 1/2 min. manual with water at 120 F.
Contaminant: ITW, Dykem Corp, Ink, Steel Blue - DX - 100

Results: Only Grease Off 2 was found to be effective, but the ultrasonic cleaning increases the efficiency or the % contaminant removed significantly. For the PW 147, which was the most effective at ~15% removal for immersion cleaning, the ultrasonics increased the efficiency.
PW: This number is high, but I conclude this cleaner is effective and not reacting with the stainless. (Coupons have been used in numerous trial and have background contaminants. Ultrasonics cleaned coupons, these 3, to near first trial weight (trial 131)

Summary:

Substrates:		Stainless Steel				
Contaminants:		Inks				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:	
Kleer Flo Company	Grease Off 2	5	91.17	<input checked="" type="checkbox"/>		
Valtech Corporation	Valtron SP 2201	5	18.39	<input type="checkbox"/>		
Valtech Corporation	Valtron SP 2200	5	47.86	<input type="checkbox"/>		
Permatex Industrial Corporation	Natural Blue	5	75.69	<input type="checkbox"/>		
International Products Corporation	LF 2100 (Liquid Foam Cleaner)	5	26.15	<input type="checkbox"/>		
US Polychem Corporation	Polychem PW 147	5	120.07	<input type="checkbox"/>		

Conclusion: